

What is claimed is:

1. A solid-state imaging apparatus comprising:

a solid-state imaging device having a plurality of pixels that image light originating from a subject, by dividing the light into a plurality of color signals; and

a signal processor that subjects photographed image data output from the solid-state imaging device to white balance correction at a gain corresponding to light source type(s),

wherein the solid-state imaging device further comprises a sensor that detects light in a wavelength range which induces a difference having a predetermined value or more between radiant energy of a first light source and radiant energy of a second light source, the sensor being provided on the surface of the solid-state imaging device; and

wherein the signal processor further comprises: a mixing ratio estimation unit that determines a mixing ratio between illumination light originating from the first light source and illumination light originating from the second light source, through use of a detection signal output from the sensor; and a gain computation unit that computes a gain where the white balance correction is to be effected, in accordance with the mixing ratio.

2. The solid-state imaging apparatus according to claim 1, wherein the mixing ratio and the gain are determined with

respect to each of the pixels.

3. The solid-state imaging apparatus according to claim 1, wherein the signal processor comprises:

a color tone correction unit for correcting a color tone by multiplying color difference signals determined from the photographed image data by a color difference matrix; and

a color difference matrix correction unit for correcting coefficients of the color difference matrix in accordance with the mixing ratio.

4. The solid-state imaging apparatus according to claim 1, wherein the signal processor comprises a light source type determination unit that determines the type of a light source from the photographed image data.

5. The solid-state imaging apparatus according to claim 1, wherein the sensor acts also as the pixel that images the color signal.

6. A digital camera comprising:

a solid-state imaging device having a plurality of pixels that image light originating from a subject, by dividing the light into a plurality of color signals; and

a signal processor that subjects photographed image data

output from the solid-state imaging device to white balance correction at a gain corresponding to light source type(s),

wherein the solid-state imaging device further comprises a sensor that detects light in a wavelength range which induces a difference having a predetermined value or more between radiant energy of a first light source and radiant energy of a second light source, the sensor being provided on the surface of the solid-state imaging device; and

wherein the signal processor further comprises: a mixing ratio estimation unit that determines a mixing ratio between illumination light originating from the first light source and illumination light originating from the second light source, through use of a detection signal output from the sensor; and a gain computation unit that computes a gain where the white balance correction is to be effected, in accordance with the mixing ratio.

7. A solid-state imaging apparatus comprising:

a solid-state imaging device having a plurality of pixels for imaging light originating from a subject, by dividing the light into a plurality of color signals; and

signal processing means for subjecting photographed image data output from the solid-state imaging device to white balance correction at a gain corresponding to light source type(s),

wherein the solid-state imaging device further comprises

a sensor for detecting light in a wavelength range which induces a difference having a predetermined value or more between radiant energy of a first light source and radiant energy of a second light source, the sensor being provided on the surface of the solid-state imaging device; and

wherein the signal processing means further comprise: mixing ratio estimation means for determining a mixing ratio between illumination light originating from the first light source and illumination light originating from the second light source, through use of a detection signal output from the sensor; and gain computation means for computing a gain where the white balance correction is to be effected, in accordance with the mixing ratio.

8. A digital camera comprising:

a solid-state imaging device having a plurality of pixels for imaging light originating from a subject, by dividing the light into a plurality of color signals; and

signal processing means for subjecting photographed image data output from the solid-state imaging device to white balance correction at a gain corresponding to light source type(s),

wherein the solid-state imaging device further comprises a sensor for detecting light in a wavelength range which induces a difference having a predetermined value or more between radiant energy of a first light source and radiant energy of a second

light source, the sensor being provided on the surface of the solid-state imaging device; and

wherein the signal processing means further comprise: mixing ratio estimation means for determining a mixing ratio between illumination light originating from the first light source and illumination light originating from the second light source, through use of a detection signal output from the sensor; and gain computation means for computing a gain where the white balance correction is to be effected, in accordance with the mixing ratio.